ABSTRACT OF THE DISCLOSURE

A solid-state image pickup apparatus includes photo-sensors arranged in the directions of row and column and each corresponding to a particular pixel included in an imaging frame. Each photo-sensor is made up of a higher- and a lower-sensitivity photosensitive cell for photoelectrically transducing incident light to electric signal charges. A corrector executes shading correction on an image signal derived from the higher-sensitivity photosensitive cell in accordance with the shading characteristic of the higher sensitivity photosensitive cell, and on an image signal derived from the lower-sensitivity photosensitive cell in accordance with the shading characteristic of the lower-sensitivity photosensitive cell.